plain, and simple as possible, conforming as nearly as may be to the popular terms in use, and above all that there should be nothing to mislead an ignorant person. Now I would ask what idea is conveyed to an ordinary unscientific mind by the term "snow-sheet"? The name is perfectly correct if read in the light of M. Poëy's explanation; but to an average lighthouse-keeper or coastguard it would certainly convey the idea of a so-called "pallio cumulus," *ready to discharge snow,* and would be used accordingly.

"Wind cloud" appears also distinctly misleading. To most minds it would, I believe, imply a cirrus or cirro-cumulus, as being the harbinger of wind. We have two excellent names in common use—"scud" and "rack,"—either of which would serve.

"Stratified cloud" is a very vague term, applicable to many varieties besides "cirro-stratus."[1]

Objections might also fairly be raised against "Belt cloud," as compared with the familiar "Noah's ark" which Poëy himself quotes elsewhere, and to the "Globular tempestuous cloud," as a very cumbrous term, although a correct one.

It is to be hoped that all these details will be fully discussed before M. Poëy's suggestions are either admitted into general use, or, on the other hand, too readily rejected. E. H.

Walthamstow, Essex

NOTE.—The references are to Howard's *Essay on the Modifications of Clouds,* third edition, Churchill, 1865, and to Poëy's *Comment on observe les Nuages,* Paris, 1879.

"Chipped Arrow-heads"

IN a number of NATURE (vol. xx. p. 483) which only lately reached us here I read an interesting account of Mr. Cushing's researches into the manufacture of flint weapons as practised by aboriginal tribes; and as I have had many opportunities of observing the method by which the Fuegians of Magellan's Straits fashion their glass arrow-heads, a few words on the matter may not be without interest to some of your readers.

One of the indications of the increase of traffic through these Straits which has of late years taken place is that empty bottles are now to be found about the shores of those anchorages which are used by passing vessels as stopping-places for the night; and bottle-glass is consequently the material used by the Fuegians of the present day, to the exclusion of obsidian, quartz, or flint. The following is the process:—A fragment somewhat approaching to the shape of the intended arrow-head is grasped firmly in the left hand, while in the right hand is held an old iron nail stuck into a short wooden handle. The fingers of the closed right hand are turned upwards, and the point of the nail is directed towards the operator's breast. He then presses with great force the blunt point of the nail obliquely against the edge of the piece of glass, when a thin scale flies off towards him. One side of the edge having been bevelled in this way, the glass is turned round, and the opposite edge flaked off in a similar manner. Working the edges alternately in this way, the glass is readily brought to the required shape. The fashioning of the point is the most difficult part of the process, the formation of the barbs being easily effected.

I have seen a native thus make a large arrow-head out of a piece of broken pickle bottle in about half an hour. The glass is never struck, but is fashioned entirely by pressure. After a little practice I succeeded in making fair imitations.

I find, moreover, that the iron tool above mentioned can be dispensed with, and that the flaking may be effected by pressing with an angular flint or with a piece of *bone,* which were probably the methods used by the Fuegians before they possessed any iron implements. R. W. COPPINGER

H.M. Surveying Ship *Alert,* Swallow Bay, Straits of
Magellan, March 21

Cup and Ring Stones

IN reply to Mr. Middleton's letter I beg to say that the Ilkley cup and ring stones have been carefully described and illustrated in a paper read by me before the Brit. Archæolog. Assoc. (see *Journal* B. A. A. for 1879, p. 93).

Further information will be found in Sir Jas. Simpson's work on the subject, which forms the appendix to vol. vi. of the *Proc.* Soc. Ant. Scot., and in Prof. Boyd Dawkins' "Early Man," p. 338.

In a large number of instances cup and ring marks have been found on the stones of cists, stone circles, and menhirs. It would therefore appear that they are connected with sepulchral rites. Cup marks are found in Scotland, Ireland, Wales, Northumberland, Yorkshire, Cumberland, Lancashire, Switzerland, Sweden, and India (see Rivett Carnac's papers in *Journal* of Asiatic Society of Bengal, 1878-9). I should be glad of evidence of their existence in Derbyshire and elsewhere in the South of England. J. ROMILLY ALLEN

23, Maitland Street, Edinburgh

Songs of Birds

CAN any musical reader of NATURE transcribe for me the notes of the king lorry (*Aprosinectus scapulatus*)? May not the *major* and *minor* keys of the cuckoos noticed by John Birmingham be sexual characteristics? The males are believed to exceed the females in number in the proportion of four or five to one, and, if this be so, the male note must be heard more often than the female. The "jerkiness of style" in the *major* cuckoo, as described, suggests that the performer is a female. A. N.

C. W. HARDING.—The teeth belong to a young horse—not yet "in mark" (*Equus caballus*). Their geological horizon appears uncertain, and they are as likely to be historic or prehistoric as pleistocene.

COMPARATIVE ANATOMY OF MAN[1]

III.

Modifications of the Negro type.—At several parts of the equatorial region of Africa, from the Gulf of Guinea to the White Nile, indications have been met with of a small race of negroes, sometimes so small that the name of pygmy may truly be applied to them, differing from the ordinary negro in the short rounded form of the head. These bear some resemblance to the diminutive members of the oceanic black races who inhabit some parts of the East Indian Archipelago, especially the Andaman Islands, and to whom the name *Negrito* is now generally applied, and Dr. Hamy, who has collected together all the evidence at present accessible as to their existence, has proposed to distinguish them by the term *Negrillo.* The Akkas of Schweinfurth appear to belong to this race. In many districts they are more or less mixed with the ordinary negroes, and their physical characters are therefore obscured, but some skulls from the West Coast of Africa in the collection of Dr. Barnard Davis bear a striking resemblance to those of the Andamanese, and have a cephalic index of 80 or upwards.

The greater part of Africa, between the equator and the most southern parts, where the Hottentots and Bushmen dwell, is inhabited by negroes, who for linguistic reasons are grouped together, and separated from the more northern tribes, and are now generally known to ethnologists by the name of *Bantu.* Their range seems to have extended southwards in comparatively recent times, encroaching upon that of the original inhabitants. They are a pastoral people, warlike, energetic, and intelligent, owning large herds of cattle, and living in villages composed of a number of beehive-like huts. The southern Bantu, who at present are the best known, from their vicinity to the British and Dutch settlements of South Africa, are divided by Fritsch into 1. The Ama-Xosa, who inhabit at present the south-east portions of the Bantu territory, adjoining the sea, between the Cape Colony and Natal. To these the name *Kafir,* derived from an Arabic word applied to them as unbelievers or heathens, is commonly given, but the name is sometimes used in a wider sense for the Bantu negroes generally. The Ama-Xosa include the well-known tribes of Gaikas and Galeikas, with whom we were at war in 1877. 2. The Ama-Zulu, situated to the north of these, in Natal and Zululand. 3. The Bechuanas, occupying the central or inland country; and 4. The Ova-hereros, or Damaras, of the western coast-lands. Each of these divisions is composed of numerous small tribes, frequently at war with each other, and constantly changing in relative importance and even locality. The growth of the Zulu nation is a striking example of the mutable character of native African political combinations. At the commencement of the present century they were an extremely insignificant tribe, but by the military and political genius of their chief, Chaka, who conquered and absorbed all the neighbouring tribes, a powerful kingdom was formed, which was consolidated by his successors, Dingaan, Panda, and Ketchwhyo, under whom, however, it has been destroyed by the superiority of European weapons and organisation, at what cost we know too well. Five crania of Zulus who were killed in the fatal battle of Isandthlwana, on January 22 of last year, have already reached the museum, through the kindness of Mr. Fynn, a magistrate in Natal, Col. Mitchell, the Colonial Secretary, and Dr. R. J. Mann, and their uniformity of characters is such that they probably are very fair average specimens of the race. They are the skulls of large, powerful men in the prime of life. The capacity of their cranial cavity is remarkable, far above that of the ordinary negro, even above that of the lower class of Englishmen, the average of the five being 1,580 cubic centimetres. One measures as much as 1,745. Their average latitudinal index is 75·1, their altitudinal index 76·6. Their orbits are remarkably small and low; index 81·7. The form of the nasal bones and nasal index (60·7) is characteristically negroid, but they differ from ordinary negroes in two important points. They are not truly prognathous, but mesognathous, the alveolar index (100·4) being intermediate between that of the negro and the European, and their teeth are small, the index being only 40·7. The crania of other Zulu and Kafir tribes previously examined give similar results, especially a larger cranial capacity and a less degree of prognathism than is found in the equatorial negro.

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[1] I am not aware whether *Geschichtete Wolken* is an accepted term in Germany. In the Bernese Oberland a very expressive name is used, *Gestreifte Wolken,* only too well known to mountaineers.

[1] Abstract Report of Prof. Flower's lectures at the Royal College of Surgeons, March 1 to March 19, on the Comparative Anatomy of Man. Continued from p. 80.

Another great division of South African people comprises those popularly known as Hottentots and Bushmen, or in their own language Koi-Koin. They formerly inhabited a much larger district than at present; but, encroached upon by the Bantu from the north and by the Dutch and English from the south, they are greatly reduced in numbers, and indeed threatened with speedy extinction. The Hottentots are at present divided into three principal groups—the Namaquas, Korannas, and the Griquas. The latter especially are much mixed up with other races, and, under the influence of a civilisation which has done little to improve their moral condition, they have lost most of their distinctive peculiarities. The pure-bred Hottentot is of moderate stature, has a yellowish-brown complexion, very frizzly hair, which, being less abundant than that of the ordinary negro, has the appearance of growing in separate tufts. The forehead and chin are narrow and the cheek-bones wide, giving a lozenge-shaped visage. The nose is very flat and the lips prominent. The women are often remarkable for immense accumulation of fat upon the nates, called *steatopygy*, and also of great elongation of the nymphæ and of the *preputium clitoridis*. In these anatomical peculiarities, and in almost everything else except size, the Bushmen agree with the Hottentots. In fact they appear to be a stunted, outcast branch of the same race living the life of the most degraded of savages among the rocky caves and mountains of the lands where the comparatively civilised and pastoral Hottentots dwelt in the plains. Their usual appellation is derived from the Dutch Bosjesman, or "man of the woods," and they have been regarded both by Kafirs and Boers as something only half human, and have been treated accordingly, and nearly exterminated. Notwithstanding their generally low condition of culture, they show remarkable pictorial power, drawing animals especially with life-like accuracy. The osteological characters of the Bushmen are tolerably well illustrated in the museum both by skeletons and crania. Their average height would appear to be from 4 feet 6 to 4 feet 8 inches, and there is very little, if any, difference between the men and women in this respect. The form of the skull is extremely characteristic, and could scarcely be mistaken for that of any other race. It has generally a very feminine, almost infantile appearance; though the capacity of the cranial cavity is not the smallest, exceeding that of the Andamanese and the Veddahs of Ceylon. In general form the cranium is rather oblong than oval, having straight sides, a flat top, and especially a vertical forehead, which rises straight up from the root of the nose. The lower occipital region is greatly developed, in marked contrast to that of the Andaman islanders. They are moderately dolichocephalic or mesaticephalic, the average of ten specimens being 75·4. The height is in all considerably less than the breadth, the average index being 71·1, so that they are decidedly low skulls. The zygomata are little developed, the malars project forwards about as much as in the Mongolian races, giving a nasi-malar angle of 140°. The glabella and supra-orbital ridges are little developed except in the oldest males. The orbits are elongated and low (average index 81·4), the space between the orbits very wide and flat, there being no depression at the root of the nose. A large portion of the ascending process of the maxilla is visible on each side of the nasals. The nasal bones are extremely small and flat, and the aperture wide; the average nasal index being 60·8, so that they are the most platyrhine of all races. On the other hand they are rarely prognathous. In this, and some other characters, there is much that recalls the infantine condition of the true negro.

Inhabitants of North Africa.—The whole of the various populations inhabiting the portion of Africa north of the Sahara Desert, from the Atlantic coasts as far south as the River Senegal on the west to the Red Sea on the east, belong to a completely different type of mankind from that which we have been last considering, and, as before mentioned, the boundaries between the two types coincide remarkably with those of zoological regions, as indicated by distinct characters of the fauna. As must naturally have happened during the vast length of time during which the people of Northern Africa and the negroes have occupied contiguous regions since the drying up of the Sahara Sea, with absolutely no physical barrier between them, considerable intermixture has taken place along the frontier line, and even for some distance into the territories of each at certain points. In the east, especially, the superior northern race has encroached far southwards, and the practice, which has existed from the most ancient times down to our own, of importing the negroes into the northern country as slaves and soldiers, has given rise to a considerable modification of the type in certain districts.

Besides the negro element which has thus partially and locally modified the characters of the inhabitants of Northern Africa, at least two other adventitious elements, although with differences small compared with those last named, appear to have come into the district and assisted to diversify the physical type. The evidence on which the first of these rests is rather shadowy; but to account for the considerable number of individuals, especially in Marocco, who depart at least in colour from the prevailing North African type, and have fair complexions, eyes, and hair, an immigration of a northern race is supposed; and as all such immigrations within the strictly historic period, such as that of the Vandals (A.D. 500) have been on too small a scale or too temporary to effect such a permanent change in a considerable portion of the population, and as there is evidence from Egyptian monuments of fair people (the Tamahou) inhabiting North Africa, to the west of Egypt, at least 1500 years B.C., this race has been associated with the builders of the megalithic monuments found scattered over the west of Europe and the north-west of Africa, who are supposed to have invaded Africa by way of Spain and Tangiers. The invasion of the country by Semitic races from the East, the Phœnicians and Carthaginians, and more recently the Arabs, who overspread North Africa by way of the Isthmus of Suez in the seventh and tenth centuries, and impressed the Mohammedan religion upon all these regions, rests upon surer historical evidence. The basis of the population of Marocco, Algiers, and Tunis are the Berbers, descendants of the Libyans or *Lebou* of the ancient Egyptians. An important section of them are the Kabyles of the French. They are mostly a settled and pastoral people. The Moors are mixed descendants of Arabs and Berbers, residing in towns. The Bedouins are the Arabs who still lead a nomadic life in the desert. There is much in common in the physical characters of all these people, and indeed with those of the South of Europe and South-West of Asia. They belong mainly to the group called *Melanochroi* by Prof. Huxley.

The Berber type, which perhaps forms the basis of the population of North Africa, is thus described by Topinard, by whom it has been carefully studied. The height is slightly above the mean, 1·68m. *i.e.*, 5 feet 6·1 inches. The skin, white in infancy, quickly becomes brown by contact with the air; hair black, straight, and abundant; eyes dark brown; skull dolichocephalic (index 74·4), leptorhine (44·3), and moderately orthognathous. The face is less elongated and of a less regular oval contour than in the Arab. The straight forehead presents at the base a transverse depression; the superciliary crests are well developed; the nose is sunken at the base, often arched without being aquiline. The moral and social qualities of the Berbers are contrasted with those of the Arabs, considerably to the disadvantage of the latter.

The enterprising and commercial spirit of the Arabs has led to their extension over a very considerable part of Africa, along the north as far as Marocco, and down the east coast beyond Zanzibar, and once, in association with Berbers, and under the name of Moors, they effected a lodgment for a considerable period in Spain and the south of France. Physically they are a fine race. Their skull, seen from above, forms a perfectly regular oval. Their face, long and thin, forms another oval, with a not less regular contour, pointed below. Their colour is perfectly white until subjected to the action of the air, when it bronzes with facility. The hair and beard are smooth, and black as jet, the limits of their implantation are clearly marked: eyes black, the palpebral openings elongated, almond-shaped, and bordered with long black eyelashes; forehead not much elevated. The curve of the nose and retreating chin give to the profile a form rather rounded than straight. The superciliary arches and glabella little developed; the root of the nose is little hollowed, so that the forehead and the dorsum of the nose are almost in a straight line. The nose is aquiline, and its point detaches itself from the alæ and descends downwards, recurved like the beak of an eagle. The cheek-bones do not project; the mouth is small, the teeth white and vertical, the ears well made and rather small, and close to the head. The skull is subdolichocephalic (index 74·0), and the nose leptorhine, 45·5.

A branch of the North African people which has received much attention from anthropologists is that called Guanche, which formerly inhabited the Canary Islands, and which previous to the discovery and conquest of the islands by the Spaniards in the fourteenth century had long been isolated from all other people, and had attained to a peculiar civilisation of its own, preserving somewhat of the purity of type generally found under such circumstances. The custom of embalming their dead in a mummified condition in rock sepulchres has permitted us to become acquainted with their physical characters. They were of small stature, and rather resembled the Berbers of the adjoining coast than any of the negro races. Their skull was of the mesaticephalic form, having an average cephalic index of 76·5, and was considerably lower than it was broad. The face was not prognathous, the nose was leptorhine, and at least those inhabiting the island of Teneriffe, who are best known to us, are remarkable for the low and elongated orbits, having, according to Broca, the lowest orbital index (77) of any race. In this respect and some others they resemble the ancient skulls of the reindeer period found in the cave of Cro-Magnon in the South of France, and it has been thought that they may be related to that race. It should be mentioned, however, that the Guanche skulls from Teneriffe in the collection of Dr. Barnard Davis do not altogether bear out this view, as they have a considerably higher orbital index than those measured at Paris.

Of all the people of North Africa the Egyptians are undoubtedly the most interesting. "When history begins to dawn, the first object the light strikes upon, and which for a long time alone rears its form above the general gloom, is the civilisation of ancient Egypt. On inquiry we find this thoroughly organised civilisation, fully supplied with all the necessaries and many of the embellishments of life, and which is alone visible in the dawning light, must have existed through ages long prior to the dawn. It recedes into the unfathomable depth of time far beyond the monuments and traditions." The valley of the Nile has been for thousands of years the scene of many events which have affected the ethnological characters of its population. Invasions and conquests more or less complete from the east, the north, the west, and the south; importation to its interior from all the regions around of prisoners and slaves in enormous numbers, many of whom have become permanent settlers and integral parts of the population: yet through all the lapse of years since the period from which the first evidence of the condition of man in that region has come down to us to the present day the mass of the population, through all the political vicissitudes which they have undergone, have presented the same general physical type. Notwithstanding the mixture of Semitic or Syro-Arabian nations, as in the Hyksos, who ruled in the Delta for nearly 500 years, and the Arabs of later times, the less important Phœnician, Jewish, and Greek immigration in the north, that of the Persians from the east, and Lybians from the west, and the Ethiopians from the south, the Copts and Fellahs of modern Egypt are the little changed lineal descendants of the subjects of the Pharaohs of the early empire. The physical characters of these are preserved to us fortunately by artistic representations, graphic and sculptural, and the still more trustworthy evidence of mummified bodies. Although there are considerable signs, as might be expected, of admixture with other races here and there, the general uniformity is striking, especially as it extends through so long a period of time. If variations appear at particular epochs the original type constantly reasserts itself, almost, if not quite, in its primitive purity.

In size the ancient Egyptians were not large, and rather delicately built; their hair was long, soft, straight, or wavy, and black; their cranium oval in form, and the average cephalic index is on the borders between mesaticephaly and dolichocephaly, and tolerably uniform in different series, collected and measured by different observers. Thus Morton gives the average of 43 specimens in American museums as nearly 75; Broca that of 81 crania at Paris as 75·58; while the average of 33 in the College museum is 75·4. Of the latter but one is as high as 80·7, and one as low as 69·6. Of the others, 20 are above 75·0, or belonging to the mesaticephalic class, and 11 below 75·0, or dolichocephalic. The average altitudinal index is below that of the latitudinal, viz., 73·1. The average cranial capacity of the males is 1,454 cubic centimetres. They are almost as orthognathous as Europeans, and have teeth of the same comparatively small size, the dental index being in 7 male skulls 40·8, and in 8 females 41·2. The nasal index of 81 measured by Broca was 47·88, and this was found to be tolerably constant in mummies of different historical periods. The average nasal index of 25 in the College collection is rather higher, viz., 48·7. The orbital index of the same crania is 86·2. Of modern Copts unfortunately but few crania have been hitherto available for examination; but Broca gives the latitudinal index of 12 at 76·39, and the nasal index at 47·15.

The cranial and other characters of the Egyptians correspond in the main with those of the Berbers and other inhabitants of North Africa, and they must be placed in the same general category in any classification of the human race founded on anatomical characters. They have no affinities with the negroes, except such as may easily be accounted for by the occasional admixture of negro blood. Indeed it is almost remarkable that there are not more signs of this having taken place. Some authors have supposed a Turanian origin for the Egyptians, but if this term is to be taken in any sense as equivalent to Mongolians, there is absolutely no support for it in their osteological characters; all the characteristics of the Mongolian races are entirely absent in the Egyptian skull. Still less can any resemblance be seen to the Australian, whose skull, compared with that of an Egyptian, presents almost as great a contrast as can be found within the limits of variation of the human cranium. The angular form, limited capacity, wide zygomata, projecting supraorbital ridges, short flattened nasals, wide nasal aperture with rounded inferior border, great alveolar prognathism, retreating chin, and immense teeth, characteristic of the Australian, are all wanting in the Egyptian. In fact the Egyptian belongs by all his anatomical characters to the type called by Blumenbach Caucasian. The much vexed questions, Who were the Egyptians? and Where did they come from? receive no answer from anatomical investigations, beyond the very simple one that they are one of several modifications of the great group of races which inhabit all the lands surrounding the Mediterranean Sea; that they here lived in their own land far beyond all periods of time measured by historical events, and that in all probability it was there that they gradually developed that marvellous civilisation which has exercised such a powerful influence over the arts, the sciences, and the religion of the whole of the Western world.

THE UNITED STATES WEATHER MAPS, SEPTEMBER, 1877

IN Canada and the United States during September, 1877, atmospheric pressure was everywhere above the normal except over a small triangular patch bounded by the Gulf of Fundy, Chesapeake Bay, and the entrance to Lake Superior. The deficiency was greatest in the North-Western States from Leavenworth to Lake Winnipeg, where it amounted to nearly the tenth of an inch, and on the coasts of the Gulf of Mexico, the deficiency at Mobile being 0·074 inch. Pressure was also under the normal over Greenland, the Atlantic, the Spanish Peninsula, Italy, nearly all Austria and Prussia, the whole of Russia and Siberia, except a patch stretching in a N.N.E. and S.S.W. direction about Lake Baikal. The centres of greatest depression were in the Atlantic between Greenland and the Azores, over a rather broad region extending eastwards from Moscow to the Obi, and from Pekin northwards to Nertschinsk, the greatest depressions below the normals of these regions for September being respectively 0·112 inch, 0·130 inch, and 0·051 inch.

Pressures were above the normal over the whole of North-Western Europe, including Iceland, Sweden, Norway, Denmark, the Netherlands, France, and Germany as far as Pressburg, the greatest excess, 0·303 inch, occurring in the extreme north-west of the British Islands. But the most extensive region of unusually high pressure embraced the whole of Southern Asia, including Japan, China, except the extreme north, India, Syria, and also Egypt; and the whole of Australia, Tasmania, and New Zealand was also above the normal, and very considerably so, the excess at Deviliquin, on the Murray River, reaching 0·265 inch.

The most remarkable disturbance in the temperature arising out of this abnormal distribution of pressure and the winds necessarily resulting therefrom, occurred over the whole of Europe, except Italy and the Spanish Peninsula. If the Weather Map be examined, it will be seen that from the west of the British Islands pressures steadily diminished on proceeding eastward over Europe, and along with this diminution of pressure pretty strong northerly winds prevailed, except in the two peninsulas already referred to, where winds were southerly and the temperatures consequently above the normal. Under the influence of these northerly winds the temperature of Europe from the North Cape southwards fell greatly below the average, a deficiency of 5°·0 or upwards being experienced at the North Cape, Christiania, Memel, Gulynki, Warsaw, and Prague. In Siberia, to the east of this cold region, southerly winds prevailed and high temperatures consequently ruled, the excess above the normal temperature being 6°·3 at Taschkent, 4°·0 at Semipalatinsk, and 2°·5 at Jenisseisk and Irkutsk. Southerly winds also prevailed over Iceland and Greenland, raising the temperature above the normal, the excess on the west of Greenland being about 4°·0, and in the north-west of Iceland 5°·0. The Weather Map shows strong southerly winds also over Canada and the northern half of the United States, where consequently the temperature was high for the season, the excess being from 2°·0 to 3°·0, rising even at some places to nearly 4°·0. Further south the excess was much less; and in some cases there was even a deficiency, as about Cape Hatteras, where northerly winds will be seen from the Map to have swept over that coast, and the temperature fell a degree and a half below the average; and along the upper reaches of the Arkansas and Red rivers, or to westward of the region of lowest pressure, where, winds being north-westerly, the temperature fell nearly a degree below the normal.

In India, pressure was unusually and continuously high from the beginning of the year, except in August, when it fell below the average over the region of the Lower Ganges and Assam. In September, however, pressure again became unusually high over all India, the excess being greatest along the northern coasts of the Bay of Bengal and the central districts from Visagapatam to Ajmere. In Assam the excess was considerable and the rainfall exceeded the average, whereas in Orissa, Western Bengal, and Berhar the rainfall was scanty. The excess above the normal pressure was also considerably less over Southern India and Ceylon than it was to northward; and with this distribution of the pressure occurred the memorable feature of the meteorology of India for the month, viz., an unusual strength of the south-west monsoon over the west of India from Goa southward, accompanied with an abnormally heavy rainfall on that coast, which extended eastward over the Deccan and the greater part of the Madras Presidency, and thus terminated the disastrous famine which had wasted Mysore and a large portion of the Madras Presidency during the previous two years.